

Minnie Cui

☎ +1 608-867-0003 | ✉ minnie.cui@wisc.edu | 🏠 minniehcai.github.io

Education

University of Wisconsin–Madison, Department of Economics & School of Business

PHD, ECONOMICS & FINANCE

- Majors: Industrial Organization, Finance

Madison, US

2022 – pres.

University of Texas at Austin, Department of Computer Science

MS, DATA SCIENCE

- Select courses: Deep Learning, Natural Language Processing, Optimization

Austin, US

2021 – 2022

University of Toronto, Department of Economics

BA HONS., ECONOMICS

- 2018 Canadian Economics Association Best Undergraduate Paper Award
- Concentration: Specialist in Economics and Minor in Mathematics
- Select courses: Applied Econometrics II, International Finance, Economic Growth

Toronto, CA

2014 – 2018

Experience

Analyst

Ottawa, CA

BANK OF CANADA, ECONOMIC AND FINANCIAL RESEARCH DEPARTMENT

2021 – 2022

- Technical Lead for Canadian NielsenIQ Data and primary data modeler for NielsenIQ Homescan's Microsoft Azure Data Lake/SQL storage solution
- Producing research on household consumption, COVID-19 inflation, niche consumption, transition to online transactions using NielsenIQ Homescan
- Research contributor to the Bank's diversity & inclusion in economics project

Research Assistant

Ottawa, CA

BANK OF CANADA, ECONOMIC AND FINANCIAL RESEARCH DEPARTMENT

2018 – 2021

- Provided research assistance on publications in the Review of Economic Studies, Journal of Monetary Economics, Economic Journal, Canadian Journal of Economics, and more
- Provided statistical analysis, regression analysis, web-scraping, geo-spatial data analysis for various projects led by Governing Council members and the Bank's Senior Research Officers

Research Assistant

Toronto, CA

UNIVERSITY OF TORONTO, FACTOR-INWENTASH FACULTY OF SOCIAL WORK

2016 – 2020

- Generated various infographics summarizing the findings of publications by the Affirmative Research Collaborative and members of the International Partnership for Queer Youth Resilience
- Created and maintained the following websites: www.inqyr.org, www.affirmativeresearch.org

Projects

Canada COVID-19 Tracker | https://mhcui.shinyapps.io/Canada_COVID/

2020 – pres.

R SHINY APPS

- Developed a dashboard that tracks Canadian daily COVID-19 cases, deaths, vaccination rates, government stringency, economic impact, and several dynamic metrics unavailable elsewhere
- Updated daily

Canada Daily Climate Data Set | https://github.com/minnzc/Canada_Daily_Climate/

2021 – pres.

PYTHON, GIT

- Created daily Canada average climate conditions (maximum, minimum, and average temperatures, total precipitation, wind gust, and more) by Census divisions and Census subdivisions data sets
- Updated weekly

Publications

Cui, M. H., Jiang, G. Mosweu B. (2021). Swimming in the Data Lake: An application to NielsenIQ Homescan [Paper Presentation]. Bank for International Settlements IFC Workshop on Data Science in Central Banking.

Presentations

Presenting author for all listed.

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|------|---|--------------|
| 2022 | BIS , IFC Data Science in Central Banking | Online |
| 2021 | ISEAPA , North American Productivity Workshop | Online |
| 2018 | Canadian Economics Association , CEA Annual Conference | Montreal, QC |

Fellowships, Scholarships, Awards

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| 2022–2026 | Doctoral Fellowship , SSHRC |
| 2020 | Women in Economics Scholarship , Bank of Canada |
| 2018 | Best Undergraduate Paper , Canadian Economics Association
The Regents Participation Awards , University of Toronto |
| 2017 | Richard Iorweth Thorman Bursary , University of Toronto
Kathleen Watson Memorial Award , University of Toronto |
| 2016 | The William and Margaret Wilson Bursary , University of Toronto
Hosinec Family Scholarship , University of Toronto
President's Scholar Program Scholarship , University of Toronto |

Technical Skills

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| Analysis | Machine learning, deep learning, geo-spatial analysis, regression analysis |
| Languages | Python, Matlab, R, SQL, HTML/CSS |
| Developer | Git, Microsoft Azure, Google Cloud Platform, Amazon Web Services, VS Code, Anaconda, PyCharm |
| Softwares | Stata, Excel |
| Create data | Simulation & modelling, web-scraping |

Citizenship & Language Proficiency

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| Citizenship | Canada |
| Languages | English (native), Mandarin (native), French (fluent) |